

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Robert L. Morgan

State of Carl. DEPARTMENT OF NATURAL RESOURCES DIVISION OF WATER RIGHTS

s 1/053/005

teutive Director 1636 West North Temple, Suite 220
State Engineer 801-538-7240

November 8, 1988

Tenneco Minerals Co. P.O. Box 2650 St. George, UT 84770

Re: Regulating Reservoir Applications - 88R195, 88R196, 88R197, 88R198

Gentlemen:

We have approved the above-referenced applications subject to the following conditions. In the case of Application 88R195, this letter will also serve as official notice of our waiver of the need for plans and specifications, pursuant to Section 73-5-5 of the Utah Code Annotated 1953.

- Any storage of water in the reservoirs created is subject to all vested water rights in your area.
- 2. All design and construction activities undertaken shall be commensurate with state-of-the-art standards.
- 3. Notification of the inspector and contractor for the projects shall be submitted to this office prior to the beginning of any construction.
- 4. All inspector's journals and results of material testing performed during construction should be submitted to this office.

Copies of your approved applications are included for your future reference. If you have any questions or need further clarification, please feel free to contact me or Gerald Stoker of our Cedar area office.

Sincerely.

Richard B. Hall, P.B.

Directing Dam Safety Engineer

RBH/cp

cc: Gerald Stoker, Cedar Area Engineer

APR 2 3 1991

DIVISION OF OIL GAS & MINING

Tenneco Minerals A Tenneco Company

P.O. Box 2650 St. George, Utah 84770 (801) 673-1606



November RECEIVED

NOV 1 5 1988

VALLE LAKE

Mr. Richard B. Hall, P.E.
Directing Dam Safety Engineer
Department of Natural Resources
Division of Water Rights
1636 West North Temple, Suite 220
Salt Lake City, Utah 84116-3156

Dear Mr. Hall:

Pursuant your letter of approval dated November 8, 1988 Tenneco wishes to notify you of the inspector and contractor for the ponds and dam construction. Through our oversight we need to inform you that the ponds construction is nearly completed. The clay and HDPE liner systems are all that remain in these structures. The dam has yet to be built. The information provided is:

- A) Inspector: George Toland, P.E. 2558 South 550
 - East, Bountiful, Utah 84010.
- B) Contractor: Lost Dutchman Construction Co. Inc., 1475 east Greg Street, Sparks, Nevada 89431.

I want to sincerely apologize for not providing this information sooner as you have requested. If I can provide any additional information please contact me at (801) 673-1606.

Sincerely,

Ken Kluksdahl

Mine Manager

KK:di

Form R-69 6/88 RECEIVED

RECEIVED APPLICATION TO CONSTRUCT A DAM IMPOUNDING LESSOV 0 7 1988 THAN 20 ACRE-FEET WATER RIGHTS

OCT 3 1 1988 WATER RIGHTS

SALT LAKE

STATE OF UTAH

SALT LAKE Application No. Received _//-Entered

The following application is submitted, pursuant to Section 73-5-12 of the Utah Code Annotated 1953, to obtain the authority to build a dam which will create a reservoir impounding less than 20 acre-feet.

| | SS: P.O. Box 2650 | C II. I | 7: 0 1 0/770 |
|----------------|---|-------------------------------|------------------------|
| Gity: . | St. George | State: <u>Utah</u> | Zip Code: _84770 |
| PURP | OSE OF DAM | | |
| | Stock Pond | Regulating Res | Diversion Dam |
| | Irrigation | Debris Basin | Flood Control |
| | Sedimentationx | Tailings Pond | Recreation |
| | Other (describe) | | |
| LOCA | TION OF DAM | | |
| | | Quarter/Quarter (i.e. NE | |
| Towns | ship <u>398</u> | Range 18W B | ase & Meridian SLB & M |
| DDOD | OCED DAM | | |
| | OSED DAM Height (vertical distance) | 40 fact | |
| Crost | Length (length of top of d | 360 | |
| | Width (width of top of da | | |
| | | | |
| Opstro | eam stope1 | vertical on 3 vertical on 1 | horizontal - |
| Down | stream slope | vertical on | horizontal |
| | | crest 1.93 acres | |
| | 어린 이 내용의 모든 생각하는 경기에 가는 생각이 되는 것이 되었다. 그리고 있다는 것이 없는 것이 없다. | crest21.3 ac.ft. | |
| Type | of dam (i.e. earthfill, cond | crete, etc.) <u>Earthfill</u> | |
| PROP | OSED OUTLET | | |
| | | inches Length | feet |
| | of pipe (i.e. concrete, stee | el. etc.) | |
| Type | | | |
| Type of | of gate or valve | N O | |
| Type of Locati | of gate or valve | el, etc.) No No No No E | • |

| 8. COMM | ENTS or silt control only | |
|-------------------------------|--|---|
| | OF SITE CONCION ONLY | |
| | | |
| - | | |
| | | |
| | | |
| | | |
| 9. PLANS Attach | any plans sketches or diagrams wh | nich will clarify the information given on this application. |
| The und | A STANDEN OF THE STAND STANDS | |
| The und aware n | ersigned acknowledge they have r | read the instructions included with this application, and a |
| The und | lersigned acknowledge they have r o construction is to begin until this | read the instructions included with this application, and a |
| The und aware n | ersigned acknowledge they have r | read the instructions included with this application, and a |
| The und aware n | lersigned acknowledge they have root oconstruction is to begin until this | read the instructions included with this application, and and a sapplication has been approved by the Utah State Enginee |
| aware n | lersigned acknowledge they have root oconstruction is to begin until this | read the instructions included with this application, and and a specification has been approved by the Utah State Enginee How A White Law Signature of Applicant |
| aware n | lersigned acknowledge they have root oconstruction is to begin until this | read the instructions included with this application, and and a specification has been approved by the Utah State Enginee How A White Law Signature of Applicant |
| Water R Area En Reviewe | lersigned acknowledge they have ro construction is to begin until this | read the instructions included with this application, and and a period by the Utah State Enginee Lea Substitute of Applicant Date Date Date |
| Water R Area En Reviewe | lersigned acknowledge they have roo construction is to begin until this | read the instructions included with this application, and and a period by the Utah State Enginee Lea Substitute of Applicant Date Date Date |
| Water R Area En Reviewe | lersigned acknowledge they have ro construction is to begin until this | read the instructions included with this application, and and a period by the Utah State Enginee Lea Substitute of Applicant Date Date Date |
| Water R Area En Reviewe | lersigned acknowledge they have ro construction is to begin until this | read the instructions included with this application, and and a particular application has been approved by the Utah State Enginee Lea & Llaberal |

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Form R-69 6/88

PPLICATION TO CONSTRUCT JCT 3 1 1988 A DAM IMPOUNDING LESS THAN 20 ACRE-FEET, 1983

WATER RIGHTS SALT LAKE

STATE OF UTAHER RIGHTS

| Applicatio | n No. 88R19 |
|------------|-------------|
| Received | 11-8-88 |
| Entered _ | |

The following application is submitted, pursuant to Section 73-5-12 of the Utah Code Annotated 1953, to obtain the authority to build a dam which will create a reservoir impounding less than 20 acre-feet.

| City: St. George | | |
|---|--|------------------------|
| | State: <u>Utah</u> | Zip Code: <u>84770</u> |
| PURPOSE OF DAM | | |
| Stock Pond | Regulating Res | Diversion Dam |
| Irrigation | Debris Basin | Flood Control |
| Sedimentation | | Recreation |
| Other (describe) | Pregnant Solution Pond | - Markacon Konson |
| LOCATION OF DAM | | |
| | Quarter/Quarter (i.e. N | NESW) NE Section 20 |
| Township 39S | Range _ 18W | Base & Meridian SLB&M |
| Downstream slope Water surface area at spillw | vertical on vertical on vertical on vertical on vertical on vay crest 0.4 acres vay crest 3.0 ac.ft. | 2 horizontal |
| PROPOSED OUTLET | inches Lengthsteel, etc.) | |
| Type of pipe (i.e. concrete, | | |
| Type of pipe (i.e. concrete, s Type of gate or valve | | |
| Type of pipe (i.e. concrete, s Type of gate or valve | downstream, center, etc.) | . 7 |

| 7. | WATER RIGHTS Describe (see instructions) Process Solution |
|----|--|
| | |
| 8. | COMMENTS |
| | |
| 9. | PLANS Attach any plans sketches or diagrams which will clarify the information given on this application. |
| | The undersigned acknowledge they have read the instructions included with this application, and are aware no construction is to begin until this application has been approved by the Utah State Engineer. |
| | Date Signature of Applicant |
| | Water Rights in Order By NA Date Date November 1 1914 Area Engineer's Hazard Rating Date Reviewed by Dam Safety By Date Comments |
| | |
| | Date of Approval November & 1988 July For Robert L. Morgan, P.E. State Engineer |

Form R-69 6/88

RECEIVED

APPLICATION TO CONSTRUCT A DAM IMPOUNDING LESS THAN 20 ACRE-FEET

DOT 9 1 1988

WATER RIGHTS SALT LAKE STATE OF UTAH 1933

| H | Application No. 88 K 17 |
|-------------|-------------------------|
| WATER RICHT | Received 11-8-88 |
| (114:21) | Entered |
| SALTIAN | |

The following application is submitted, pursuant to Section 73-5-12 of the Utah Code Annotated 1953, to obtain the authority to build a dam which will create a reservoir impounding less than 20 acre-feet.

| | Address: P.O. Box 2650 | | F: 0 : 0/770 | | |
|----|--|---------------------------|---------------------|--|--|
| | City: St George | State:Utah | Zip Code: _84770 | | |
| 2. | PURPOSE OF DAM | | | | |
| | Stock Pond | Regulating Res. | Diversion Dam | | |
| | Irrigation | | | | |
| | | Tailings Pond | . Recreation | | |
| | Other (describe) Barren | Solution Pond | | | |
| 3. | LOCATION OF DAM | | | | |
| | County Washington | Quarter/Quarter (i.e. | NESW) NF Section 20 | | |
| | Township 39S | | | | |
| | | | | | |
| 4. | PROPOSED DAM | 15 fact | | | |
| | Dam Height (vertical distance) | | | | |
| | Crest Length (length of top of dam) | | | | |
| | Crest Width (width of top of dam) | | | | |
| | Upstream slope1 | vertical on | horizontal | | |
| | Downstream slope1 | vertical on | horizontal | | |
| | Water surface area at spillway crest acres | | | | |
| | Reservoir capacity at spillway crestac.ft. | | | | |
| | Type of dam (i.e. earthfill, concrete | e, etc.) <u>Earthfill</u> | | | |
| 5 | PROPOSED OUTLET | | | | |
| J. | Inside diameteri | nches length : | feet | | |
| | | | | | |
| | Type of pipe (i.e. concrete, steel, etc.) Type of gate or valve | | | | |
| | Location of gate (upstream, downstream, center, etc.) | | | | |
| | sociation of Bate (aporteant, downs | | | | |

| 7. WATER RIGHTS Describe (see instructions) Process Soluti | ion |
|---|--|
| | |
| . COMMENTS | |
| | |
| | |
| . PLANS Attach any plans sketches or diagrams which w | vill clarify the information given on this application. |
| The undersigned acknowledge they have read the aware no construction is to begin until this apple | he instructions included with this application, and are lication has been approved by the Utah State Engineer. |
| <u>10-26-88</u> Date | Signature of Applicant |
| Water Rights in Order By A A B Area Engineer's Hazard Rating Reviewed by Dam Safety By Comments | Date |
| | |
| Date of Approval Normber 8, 1988 | Robert L. Morgan, P.E. State Engineer |

Form R-69

RECEIVED

A DAM IMPOUNDING LESS THAN 20 ACRE-FEET

T 1963 PALTIAXE

SST 0 _ 1988

WAYER RIGHTS SALT LAKE

STATE OF UTAH

Application No. 28K1,98
Received 11-8-88
Entered

The following application is submitted, pursuant to Section 73-5-12 of the Utah Code Annotated 1953, to obtain the authority to build a dam which will create a reservoir impounding less than 20 acre-feet.

1. APPLICANT INFORMATION

| | 2650 | |
|---|---|---|
| City: St. George | State: <u>IIrah</u> | Zip Code: _84770 |
| PURPOSE OF DAM Stock Pond Irrigation Sedimentation | Regulating Res Debris Basin Tailings Pond | Flood Control |
| Other (describe) | water pond | |
| LOCATION OF DAM County <u>Washington</u> Township <u>398</u> | Quarter/Quarter (i.e Range18W | . NESW) <u>NE</u> Section <u>20</u> Base & Meridian <u>SLB&M</u> |
| Crest Length (length of Crest Width (width of to Upstream slope 1 | istance)15feet top of dam)5 eet op of dam)5 feetvertical on | horizontal - |
| Water surface area at sp | vertical on pillway crest 0.4 acres pillway crest 3.0 ac ft | horizontal horizontal |
| Water surface area at sp Reservoir capacity at sp | vertical on | |
| Water surface area at sp Reservoir capacity at sp Type of dam (i.e. earthf PROPOSED OUTLET Inside diameter | pillway crest 0.4 acres pillway crest 3.0 ac.ft. | feet |

| WATER RIGHTS Describe (see instructions) Process water | |
|--|---|
| | |
| COMMENTS | |
| | |
| | ill clarify the information given on this application. |
| The undersigned acknowledge they have read the aware no construction is to begin until this applead to be a second | he instructions included with this application, and are ication has been approved by the Utah State Engineer. Lea Shaling Signature of Applicant |
| Water Rights in Order By Area Engineer's Hazard Rating Reviewed by Dam Safety By Comments | Date |
| Date of Approval Normber 8, 1988 | Sant & All |
| Date of Approval Notifice of 1100 | Robert L. Morgan, P.E. State Engineer |